Román Montoto - assistant professor *(author and presenter)*
Phillip G. Mead – associate professor *(author and presenter)*
Department of Architecture & Interior Design - AAS 207
College of Art & Architecture - University of Idaho, Moscow, ID 83844-2451

The Search for a New Pre-disciplinary, Trans-disciplinary Core

This paper challenges the notion that students must be immersed in a specific design discipline at the foundation level. In a tradition where comfort is found in familiar disciplinary knowledge and accreditation contexts, new academic approaches are promoting flexible interdisciplinary thinking with-in themselves and the outside world. This paper asserts that a *pre*-disciplinary core is necessary in order to be both *inter*-disciplinary and *trans*-disciplinary. Like stem cells whose DNA awaits the last bit of instruction to form a liver, or a heart, our students need a flexible core of knowledge that can be utilized across disciplines. At a time when design solutions for global warming could narrow our architectural education towards efficient linear engineering curriculums, we need a strong counterbalance of humanities and art to challenge and expand our students' thinking.
In 2001, the University of Idaho's Department of Architecture questioned the relevance of its art based beginning design foundation shared with other disciplines of the College of Art and Architecture. As one of few programs in the nation tied to a broader college art core, the architecture faculty was beginning to question how and whether this inter-disciplinary core was essential to the education of an architect. While this debate was in progress, the university upper administration, in the grips of the post 9/11 financial crisis, decided to eliminate our poorly funded College of Art and Architecture and merged it into the much larger College of Letters, Arts, and Social Sciences. Then came a critical tipping point; it was announced that the Fine Arts Program would be eliminated from the university. Unanimous protest erupted from the architecture faculty and alumni as well as other prominent artists and citizens within the state. The Fine Arts were seen as core disciplines of the college and it appeared as if the university administration had removed the nucleus and pre-disciplinary binding of the former college. Luckily, the Fine Arts program was not eliminated, but the mere threat led to a series of protests and lobbying efforts eventually leading to the Idaho State Board of Education restoring the College of Art and Architecture (CAA) in 2006. This stimulated a re-invigoration and confidence in not only the Fine Arts Program, but also art as an inter-disciplinary foundation to the re-newly allied design departments.

The reinstatement of the college also sparked the opportunity to re-think the art foundation as more integrative of disciplines other than Art. In previous years, many of the college departments, which include architecture and interior design, landscape architecture, art and design, and virtual technology and design, began to drop significant portions of the original foundation originally consisting of four credits of drawing, four credits of 2D and 3D design fundamentals, and four credits of art history. Their substitutions had emerged as discipline specific introductory courses, a compromised version of the original core experience formulated by Professor David Giese in 1977 from a Bauhaus inspired curriculum. Giese coordinated this curriculum

until the late 1992 when the responsibility shifted to a series of professors and graduate teaching assistants whose prime research interests lay in other areas.
When the college re-formed in 2006, the faculty met as a whole through a series of visioning workshops determining the need for a new set of sensibilities for the delivery of core content that echoed the college's initial Bauhaus inter-disciplinary spirit for combining art, architecture, and landscape architecture. This historic curriculum was developed after WWII under the guidance of Theodore Prichard who received his graduate training at Harvard under Walter Gropius and Marcel Breuer. This post-war pedagogy contributed to a spirit of inter-disciplinarity that permeated through the college, educating a number of successful alumni many of who boast of the college's ability to prepare students for any number of professions outside traditional design disciplines.

Of these alums, three have transcended the field of architecture to professions related to construction: Art Troutner, who invented the Truss-Joist, Jack Lemley, who headed construction efforts of the English Chunnel, and Jonathan Segal, who has succeeded as an architect/developer/contractor in San Diego, CA. Of these three, Segal and Troutner have suggested that their creative reasoning, adaptability, and application are a result of a multi-disciplinary foundation. Jack Lemley has stated that the first year art classes were very important towards the development of his ability to conceptualize, which he thinks is an important part of engineering and construction (Lemley 2008). With construction having such prominence in their work, one might think that attending construction oriented schools such as Cal Poly, SLO, or Washington State University would have better suited their needs. However, both Segal and Troutner have consistently voiced their appreciation of the arts early in their education.
The initial foundations committee of the newly reinstated CAA took into account Prichard's Bauhaus legacy in 2006 when it launched a series of meetings resulting in a pedagogical core that included assignments inspired by the college's five disciplines. This new core included each of the five programs through a representative module with assignments that distilled their root discipline to the point where their application could be utilized in any of the five design disciplines. The final assignment would focus on art as the creative common ground from which the previous assignments could retrospectively create a meaningful whole to the foundation sequence. This essentially reflects an inter-disciplinary approach that involves the transfer of methods for creative seeing, conceptualizing, and developing from one discipline to another. This also works towards the goal for multi-disciplinary exposure of theories and principles, through lecture and exercise, while offering the possibility for the discovery of the root discipline's crossovers into other disciplines. When this plan was unveiled in the fall of 2006, the Department of Art and Design objected to it on several points. Because of its integration of drawing into the studio component, some faculty members of art and design thought that beginning drawing would be compromised. Additionally, because design problems would be inspired by each of the college's disciplines in a series of modules, it appeared that art and design fundamentals would be compromised rather than reinforced due to similar re-structuring a decade before. When implemented, the sequence essentially divided the core lecture class into a series of root disciplinary presentations that did not interrelate and created opportunity for territorial lobbying, or

'advertisements', resulting in segregation, not integration. While the initial 2006 plan did serve to present CAA disciplinary options it did not directly address trans-disciplinary linkages, fusions, and college strengths for disciplinary beginnings rooted in Art and Design. After these initial objections, the foundations committee slipped into dormancy in anticipation of the arrival of a new College of Art and Architecture dean.

"In spanning multiple disciplines, interdisciplinary programs by their nature reach across the traditional boundaries of colleges and departments. In this context, interdisciplinary is defined as meaning University-wide, or programs involving faculty from more than two colleges where no single college has a majority of the curriculum or faculty."
(Idaho State Board of Education 2002)

Upon arrival of the new dean in the fall of 2007, the CAA Foundations Committee re-formed with new members and a new *trans*-disciplinary inspired vision for learning as a function to link the five disciplinary programs. Initial conversations, gravitated around *trans*-disciplinary potentials resulting from *pre*-disciplinary core foundations. In contrast to the 2006 plan, this approach strived to distinguish the multi-disciplinary dynamics and relationships through the juxtaposition of disciplinary intentions. As discussions continued, it became clear that defining the differences between multi-, inter-, and trans-disciplinarity was necessary for understanding their sensibilities as they relate to the solving of design problems through the process of creating, developing, and communicating as linked to artistic intention. Basarab Nicolescu, *President of the Centre International de Recherches et d'Estudes Transdisciplinaires*, discusses their differences and uniqueness:

"Multi-disciplinary involves the study and/or critique of a disciplinary topic or object through another while maintaining service to the goals of the root discipline. Inter-disciplinary approach transfers methods for creation/development within one discipline to another in 3 degrees: a.) degree of application, b.) epistemological degree, c.) generation of new disciplines with goals remaining in the root-discipline

Trans-disciplinary is radically different from multi- and inter- because of its goal, the understanding of the present world, which cannot be accomplished in the framework of uni-disciplinary research. … it revalues the role of deeply rooted intuition, of imagination, of sensitivity, and of the body in the transmission of knowledge. Universal sharing of knowledge cannot take place without the emergence founded in the trans-disciplinary attitude, one which implies putting into practice trans-cultural, trans-religious, trans-political, and trans-national visions." (Nicolescu 1999)

Although all three approaches spill over disciplinary boundaries, the trans-disciplinary attitude most aligns with the college's vision statement which calls for *"integrating concepts of art, design, and technology with a focus on cultural and environmental stewardship".* Achieving this required the new foundations committee to discover each of the five pre-disciplinary conditions that had potential to overflow to another based on fundamental principles, skills, and objectives. This led to a series of conversations and dialectical debates for deciphering distinctions between art and design based on intent,

subject matter, and goals. Writings by Bernard Panofsky and William Kirby Lockard serve to distinguish between the two. Panofsky discusses art in his book *"Meaning in the Visual Arts"*:

"…a work of art always has aesthetic significance…it demands to be experienced aesthetically...Art is a man-made object, however it either demands or does not demand to be so experienced, for it has what the scholastics call intention" (Panofsky 1983)

Lockard discusses differences in drawing as they relate to Art and Design in his book *"Design Drawing"*:

"As art, drawing values self-expression, choice of subject, virtuoso technique, many levels of communication, and, above all, the drawing itself as a unique, one of a kind."
"As design drawing, drawing must satisfy several paradoxes. Design drawing should be committed to clear, complete representation of design and simultaneously tentative and open to improvement. The may be informal but they must be accurate. They should represent the design at once objectively and quantitatively as an integrated object and also subjectively and qualitatively as an environment to be experienced. They are absolutely essential in generating, evaluating, improving, and recording design." (Lockard 2000)

With these thoughts in mind, the foundations committee agreed to a working definition that distinguishes between art and design. As Panofsky and Lockard suggest, art has *creative and expressive intention* that embraces the risk involved with ambiguous parameters and intuitive processes. In contrast, design has *purposed intention* through calculated risk, factoring distinct parameters, and employing strategic methodologies. The overlap between art and design leads to a pre-disciplinary framework for the foundations course composed of three primary areas: *elements*, *tools*, and *intention*. *Elements* include principles such as Visual Literacy (Dondis 1973) and Point Line to Plane primers. The category of *tools* includes strategies such as drawing as thinking, composition, improvisation, and critical thinking. The last area, *intent and conceptualizations*, explores beginnings as they relate to inspiration, interpretation, and manifestation. The distinction and dynamic of these three areas coagulate into a scaffolding of *pre*-disciplinary foundations *(stem cells)* facilitating *trans*-disciplinary potential. This potentiality embeds itself into the creative and foundational sensibilities of the College of Art and Architectue student, creating a disciplinary agility that translates, transcends, and transfers to other disciplines.

Trans-disciplinary approaches for understanding future environments and challenges are increasingly becoming part of our way for understanding, processing, and solving global problems. In Bruce Mau's book *"Massive Change"* he discusses issues ranging from urban housing to imaging as a series of 'economies', which is a *trans*-disciplinary mechanism to identify particular conditions. The ideas behind this phrasing speak to notions of efficiency and responsibility as economies which regulate design as related to developing sustainable environments, movements, and material uses.

economy: 2b: efficient and concise use of nonmaterial research (as effort, language, or motion) (Merriam-Webster, Incorporated n.d.)

Mau writes on the intent of his book:

"Massive Change is an ambitious project that humbly attempts to chart the bewildering complexity of our increasingly interconnected (and designed) world. We have done our best to open it up by breaking it down… We hope to make evident the design decisions that go on and are made manifest across disciplines. Massive Change is not about the world of design; its about the design of the world." (Mau 2004)

The topic of *"the design of the world"* resonates with the complexities, conditions, and variations relative to how the CAA foundations sequence can be charged and the preconceptions of the incoming freshman about design can be challenged. Factoring, distilling, and applying attributes of the disciplines that comprise the University of Idaho's College of Art and Architecture to each other lead to understandings of their relationships and *pre*-disciplinary state by which *trans*-disciplinary potentials may be realized. The CAA Foundations Committee continues to work in the developmental stages towards offering this as a means to build tolerance for our complex world by "putting into practice trans-cultural, trans-religious, trans-political, trans-national, and trans-material visions" (Nicolescu 1999).

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